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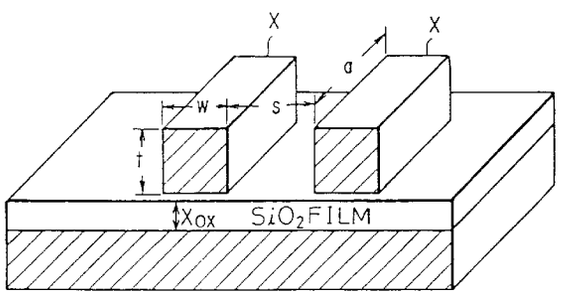
(54) **A signal processing device and a method for transmitting signal.**

(57) The device comprises superconducting wiring for providing an output signal or a transmitted signal correctly corresponding to an input signal without increasing the temperature of the device. The signal processing device has a signal input end, a signal output end, and proper signal processing circuits interposed between the signal input and output ends. The superconducting wiring connects the signal input end with the signal output end. An output end of the wiring is open or in a high-impedance state. The pulse width of an output pulse signal (O) provided from the output end is narrower than that of an input pulse signal (T3) provided to the input end, and the pulse voltage of the output pulse signal is higher than that of the input pulse signal. The length of the wiring is set to be approximately 25% of the product of the pulse width and the phase velocity of the signal transmitted through the wiring.

Fig.2



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EUROPEAN SEARCH REPORT

Application Number
EP 92 40 0072

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	SOLID STATE ELECTRONICS vol. 32, no. 11, November 1989, OXFORD, GB pages 947 - 959 Tewksbury S.K. et al: 'High Tc superconductors for digital system interconnection' * page 948; figure 1 * * page 953, paragraph 2 - page 955, paragraph 1 *	1-5	H01L39/24 H01L21/90
A	PATENT ABSTRACTS OF JAPAN vol. 13, no. 272 (E-777)22 June 1989 & JP-A-10 62 020 (FUJITSU LTD) * abstract *	1-2	
A	PATENT ABSTRACTS OF JAPAN vol. 12, no. 72 (E-588)5 March 1988 & JP-A-62 214 714 (FUJITSU LTD) * abstract *	1-2	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	07 OCTOBER 1992	HAMMEL E.J.

CATEGORY OF CITED DOCUMENTS

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